February 9, 2004

MEMORANDUM FOR   Chief Information Officers

FROM: Thomas N. Pyke, Jr.

SUBJECT: Enterprise IT Architecture Due March 31, 2004

As discussed at the October 2003 CIO Council meeting, your revised Enterprise Information Technology (IT) Architecture is due to the Department of Commerce Enterprise IT Architecture (EITA) Advisory Group for review by March 31, 2004. The Advisory Group has prepared guidance to assist you in preparing the Architecture and in understanding how the Architecture will be evaluated. We encourage you to use the Metis Designer Version 3.4 application to model your Enterprise IT Architecture.

The Clinger-Cohen Act of 1996 requires that the Chief Information Officer of an executive agency be responsible for "developing, maintaining, and facilitating the implementation of a sound and integrated information technology architecture." Following requirements of the Act, Office of Management and Budget guidance, and Department of Commerce guidance, we have also instituted a capital planning and investment control process and developed both Strategic and Operational IT Plans. Enterprise IT Architectures are related to and will be reflected in these other requirements to form an integrated IT planning structure.

The purpose of the Strategic IT Plan is to describe in general terms how IT will be used to support the key program missions and goals defined in the organization's Strategic Plan. The purpose of the Operational IT Plan is to provide a more detailed description of IT actions and investments planned in the near term and to support an investment analysis of these plans. These documents will need to reflect the Architecture and architectural changes your organization plans to make. The Strategic IT Plan might be used to define a Target Architecture and a long-term Sequencing or Migration Plan, while the Operational IT Plan might detail the implementation steps currently planned. Within the context of the overall IT Planning and Investment Control Process, the Commerce IT Review Board specifically rates IT investments on compliance with operating unit, Departmental, and Federal Architectures.

One challenge in working on Enterprise IT Architecture is developing a common understanding of what that term actually means. The Advisory Group has prepared guidance that describes and reflects the understanding that will be used to evaluate operating unit efforts. For the Department of Commerce, an Enterprise IT Architecture is defined as a process and framework that lead to the development, implementation, maintenance, and use of a "blueprint" that explains and guides how an organization's IT and information management elements work together to accomplish the mission of the organization. The blueprint must take into account the organization's business,

performance measures, information, and work flows. It cannot be a set of technical decisions made in isolation of these mission elements.

The Advisory Group has prepared several pieces of guidance to assist you in your architecture efforts. The Group offers other assistance as well. These are as follows:

Information Technology Architecture: What Is It, Why Should You Care, and How Do You Do One? This document is a "plain language" overview of the purpose of an IT Architecture and how one can be developed. Its objective is to assist both managers and technical personnel in having a shared understanding of the basics of the architecture process.

Department of Commerce Information Technology Architecture Elements Guidance List. This document supplements the overview above by providing more detailed "cookbook" descriptions of how to execute the steps toward an Architecture.

Evaluation Criteria for Meeting the Department of Commerce Information Technology Architecture Requirements. This document gives the evaluation criteria against which operating unit IT architecture efforts and status will be measured and against which individual IT Architectures will be evaluated. An IT Architecture Development Checklist and selected definitions are also provided. You should review the checklist before and after documenting your Architecture to ensure that you have considered all of the necessary elements.

IT Architecture Capability Maturity Model. This model provides a framework and structure to help guide you to improve the maturity of your IT architecture process over time.

Sample Enterprise IT Architecture Documents. Many people would like to see examples of what other organizations have done. You will need a userid and password to access this secure section of the Architecture Web site. Contact Tom Pennington at 202-482-5899 or Ira Grossman at 301-713-3345 x 140, who can provide the necessary information as well as guide you to examples that are germane to your efforts.

Consultations. The Advisory Group offers "personal" consultation. Each DOC operating unit is unique. Each Enterprise IT Architecture will exhibit special characteristics, and Commerce's architecture requirement contains the flexibility to allow organizations to use differing approaches to reflect these characteristics. The Advisory Group is available to review your plans for revising and refining your Architecture to ensure in advance that the Architecture will generally meet the Department's guidance and will lead to successful and useful architecture tools. The Advisory Group is also available to give advice on any other aspect of your architecture efforts that may be causing difficulty or uncertainty.

FY 2004 Goals. The attachment provides a list of key goals for the FY 2004 architecture submission. Use these to supplement the guidance provided above.

Except for the Evaluation Criteria and the Architecture Capability Maturity Model, none of the guidance is mandatory. You are not required to use any specific approach or produce specific sets of documentation, although some form of documentation is required. You must decide what elements apply to your enterprise and what format of documentation will best suit your needs as a tool to guide your strategic and operational IT activities and to conduct IT capital planning and investment analyses.

We encourage you to use the Metis architecture modeling tool. This will help you portray complex relationships, ease the documentation effort, and help you ensure that architecture development is an ongoing, dynamic process. Please use the Department of Commerce Enterprise IT Architecture (EITA) Framework for describing your Architecture through Metis. For those submitting your Architecture through Metis, provide a brief companion document that parallels the elements of the evaluation criteria and provides a narrative to explain where you are in the process and any other contextual material that might be useful to evaluators and that might not be readily apparent from the Architecture as portrayed in Metis.

Submit your Architecture electronically to Tom Pennington (tpennington@doc.gov), the Department's Chief Architect, and to Ira Grossman (ira.m.grossman@noaa.gov), Chair of the EITA Advisory Group, by March 31, 2004 . Finally, you will be contacted to schedule a date to present your EITA to the DOC Enterprise IT Architecture Advisory Group.

Attachment

cc: Enterprise IT Architecture Advisory Group

Goals for FY 2004 IT Architecture

For the FY 2004 IT Architecture submissions, the following areas should be of special concentration. These recommendations are based on the overall results of the prior years' assessments and areas of focus Government-wide.

- Linkage to the Strategic Planning, Strategic and Operational IT Planning, and IT Capital Planning and Investment processes, identifying how the Architecture is used and integrates with and supports the other efforts. **Provide concrete examples of how the Architecture has been useful to you, for instance, the Architecture allowed you to identify and eliminate duplicate systems.**

- A detailed governance structure for compliance with the Architecture in investment review, procurement, and system implementation, as well as for maintenance of the Architecture itself.

- Strengthened integration of IT security throughout the Architecture.

- Alignment with the Federal Enterprise Architecture (FEA). This should include the following:

  - Identification of performance measures following the Performance Reference Model.
  - A complete linkage to the Business Reference Model for all functional areas within the operating unit (including administrative and support functions).
  - First level breakdown of functions relating to the Service Component Reference Model.
  - Operating Unit Technical Reference Model (TRM) and/or linkage to the FEA TRM.
  - Use of the Data Reference Model when it is released by the Office of Management and Budget.

- Linkage to the Government-wide e-Government initiatives including existing or planned interfaces to them for delivering operating unit information and/or services.